31. (once amended) The synthetically produced protein of claim 30, wherein said human protein is a cytokine.

In the Abstract:

After the Claims, please insert the following paragraph:

Abstract



Proteins of moderate size having native peptide backbones are produced by a method of native chemical ligation. Native chemical ligation employs a chemoselective reaction of two unprotected peptide segments to produce a transient thioester-linked intermediate. The transient thioester-linked intermediate then spontaneously undergoes a rearrangement to provide the full length ligation product having a native peptide bond at the ligation site. Full length ligation products are chemically identical to proteins produced by cell free synthesis. Full length ligation products may be refolded and/or oxidized, as allowed, to form native disulfide-containing protein molecules. The technique of native chemical ligation is employable for chemically synthesizing full length proteins.

REMARKS

Sequence Listing:

Examiner Russel objected that SEQ ID NOS have not been inserted into the specification. Responsive to this objection, Applicant has amended the specification by inserting the required SEQ ID NOS.